

Wu, Jennifer

From: Emi Kondo - NOAA Affiliate <emi.kondo@noaa.gov>
Sent: Monday, February 13, 2017 1:37 PM
To: Collier, Travis; Malenna Cappellini; Gale, William; Wu, Jennifer
Cc: Emily Reynolds - NOAA Federal
Subject: Additional questions about effluent

Hi all,

I'm trying to see if there is a way for us to quantify the chemicals in the effluent when it leaves the hatchery and was wondering if you could help me with the following to the best of your ability:

- Formaldehyde - I realize that the amount/concentration used would depend on the vet prescription and the frequency, but can we somehow characterize it based on historical use? I think the information for those years when the vet has been on station would be most representative of current operations.
 - What is the concentration and volume that the vet usually prescribes? Or can we use an average or maximum that the vet has used in the past?
 - How often was it used annually in the past?
 - Does this get discharged through the abatement pond (so diluted by additional 5 cfs of water after use?) or through the outfall (42 cfs)?
- Iodine - I have that it is used at 75 ppm, 3 times a year. Do you have an estimated volume? Because the iodine solution goes into the abatement pond, I assume it gets an additional dilution by 5 cfs of water after use before it enters Icicle Creek...
- Potassium permanganate - I realize this chemical is not used frequently, if at all, but is there a way to somehow characterize the volume and concentration? E.g., a maximum a vet has prescribed in the past? Average? Then, would it get discharged through the abatement pond or through the outfall?

(b)(6), Emily Reynolds (CC'ed here; 503-231-6290) is the POC for this issue.

Thanks,
Emi

--

Emi Kondo
NEPA Support, Scientist VII
Contractor with Ocean Associates, Inc.
Anadromous Production and Inland Fisheries Program
NOAA Fisheries, West Coast Region
(503)736-4739
Emi.Kondo@noaa.gov